

ATTACHMENT ____

**STATEMENT OF WORK
FOR REMEDIAL DESIGN / REMEDIAL ACTION OF CMUs 2, 4, 5, 6, & 7**

**ANACONDA COPPER MINE SITE
INTERIM ADMINISTRATIVE ORDER ON CONSENT**

_____ 2017

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1. INTRODUCTION

1.1 Purpose of the SOW: This Remedial Design / Remedial Action (RD/RA) Statement of Work (SOW) sets forth the procedures and requirements for implementing the remedial action at the Anaconda Copper Mine Site (Site), Lyon County, Nevada. This SOW is specific to Site Closure Management Units (CMU) 2, 4, 5, 6, and 7, as described in the Interim Administrative Settlement Agreement and Order On Consent for: (i) Site-Wide Remedial Investigation / Feasibility Study, (ii) Remedial Design / Remedial Action, and (iii) Fluid Management (Order) and the Record of Decision (ROD) executed by the [Division and the United States Environmental Protection Agency (EPA)] on [DATE], 2017 (the Remedial Action). The Remedial Action, as described in this SOW, does not include all actions that may be required to complete the permanent remedy for the Site. Additional actions will be selected, designed, and implemented following completion of RI/FS activities described under a separate SOW to the Order.

1.2 Structure of the SOW

- ☐ Section 2 (Community Involvement) sets forth the responsibilities for community involvement for both the Nevada Division of Environmental Protection (NDEP) and Atlantic Richfield Company (ARC).
- ☐ Section 3 (RD/RA Work Plan) sets forth the requirement to develop an RD/RA Work Plan for the remedial design and remedial action work contemplated under this SOW.
- ☐ Section 4 (Remedial Design of CMUs 4 and 5 Fluid Management System (FMS) Ponds) sets forth the process to develop the Remedial Design (RD) for CMUs 4 and 5 FMS Ponds, which includes the submission of specified primary deliverables.
- ☐ Section 5 (Remedial Design of CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure) sets forth the process to develop the RD for the remaining work in CMUs 2, 4, 5, 6, and 7, including heap-leach pad (HLP) closure, which includes the submission of specified primary deliverables. The parenthetical "(HLP)" notations for CMU 4 and 5 in the titling of this grouping of work is intended to indicate that the HLP closure work for CMUs 4 and 5 is covered here, while the FMS Ponds associated with CMUs 4 and 5 is covered in a separate grouping of work (Section 4).
- ☐ Section 6 (Remedial Action) sets forth the requirements for completing each phase of RA, including primary deliverables related to completion of the RA.
- ☐ Section 7 (Reporting) sets forth ARC's reporting obligations.
- ☐ Section 8 (Deliverables) describes the content of the supporting deliverables.
- ☐ Section 9 (Schedules) sets forth the schedule for submitting the primary deliverables and the schedule of primary milestones regarding the completion of the RD/RA activities.

1.3 Scope of the Remedy: The Scope of the Remedy includes the following activities (Work) which will be implemented in general consistency with the ROD:

- (a) CMUs 4 and 5 FMS Ponds RD/RA - Design and construction of one or more FMS ponds associated with CMUs 4 and 5. This work will provide maintainable

fluid management impoundments for the Phase III-4X HLP and the Phase III-South HLP in addition to providing adequate fluid storage volume to allow the remaining RD/RA activities under this SOW to be completed. FMS ponds will be sized to accommodate no more than one acre of have an appropriate active evaporative surface area per two gallons per minute (gpm) necessary to manage anticipated flows of HLP draindown fluid.

(b) CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD/RA - This work shall include the design and implementation of grading and covering of CMUs 2, 4, 5, 6, and 7 HLPs and related adjacent work activities. The Phase III-4X HLP, Phase III-South HLP, Phase I/II HLP, Phase IV Slot HLP, and Phase IV-VLT HLP shall be graded and covered with the appropriate cover material. The current presumption is that the HLP covers and other remedy elements such as stormwater management features will be non-vegetated and constructed of on-site waste rock, tailings materials, or nearby alluvial soils/rock, or a combination thereof. The work shall also include the following elements subject to review and approval: development of borrow source(s); closure of existing FMS pond precipitates in place, in existing on-site concrete vats, or otherwise on-site; closure of TENORM and other low-level radioactive materials in-place or by placement in on-site concrete vats; capping of concrete vats; and design and construction of on-site repository(ies), as needed, for placement of pond precipitates or other on-site waste materials. Stormwater management channels, culverts, or ponds will be designed and constructed as necessary to minimize stormwater runoff into the FMS and to manage stormwater runoff from the mine area. New individual or combined fluids management ponds will be designed and constructed to provide maintainable fluid management impoundments for the Phase I/II HLP, the Phase IV Slot HLP, and the Phase IV-VLT HLP. Subject to review and approval, fluid management ponds will be sized to accommodate no more than one acre of active evaporative surface area per two gallons per minute (gpm) of HLP draindown fluid. Adjoining portions of OU-3 (Process Area), OU-4 (Evaporation Ponds), OU-5 (S-23 Waste Rock Area {WRA} and the W-3 WRA), and OU-6 (VLT) will be closed along with the various HLP closure activities to the extent that the areas are needed to accommodate the remedy design or to the extent that efficiencies can be gained in including such areas. Any work items in this paragraph that were not specifically described in the ROD may require either documentation (for non-significant or minor changes), explanation (for significant differences), or amendment modifications of to the ROD (for fundamental changes), pursuant to the NCP § 300.435(c)(2) and § 300.825.”

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- 1.4 Definitions:** The terms used in this SOW that are defined in Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), in regulations promulgated under CERCLA, or in the Order, have the meanings assigned to them in CERCLA, in such regulations, or in the Order, except that the term “Paragraph” or “¶” means a paragraph of the SOW, and the term “Section” means a section of the SOW, unless otherwise stated.

2. COMMUNITY INVOLVEMENT

2.1 Community Involvement Responsibilities

NDEP has the lead responsibility for developing and implementing community involvement activities at the Site and providing technical assistance to the extent necessary and appropriate, to the Yerington Paiute Tribe, the community, and Walker River Paiute Tribe. As appropriate, NDEP will prepare a draft Community Involvement and Participation Plan (CIPP), any Technical Assistance Plan(s), and community fact sheets prior to distribution. If requested by NDEP, ARC will support NDEP's community involvement activities, including participation in (1) the preparation of information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification, and (2) public meetings that may be held or sponsored by NDEP to explain activities at or relating to the Site. ARC's support of NDEP's community involvement activities may include providing online access to initial submissions and updates of deliverables, as well as providing online storage of all Site documents. NDEP may describe in its CIPP, ARC's responsibilities for community involvement activities.

3. REMEDIAL DESIGN / REMEDIAL ACTION WORK PLAN

3.1 RD/RA Work Plan: ARC shall submit a Remedial Design / Remedial Action Work Plan (RD/RA WP) for NDEP approval. The RD/RA WP must include the following components:

- (a) Project/site description;
- (b) Design criteria;
- (c) Conceptual design descriptions for each major remedy component;
- (d) A description of the anticipated RD and RA steps. The RD/RA WP will describe the stages of the RD and the RA as follows:
 - (1) CMUs 4 and 5 FMS Ponds – The RD and RA work associated with the CMUs 4 and 5 FMS ponds will be conducted as the first grouping of work.
 - (2) CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure – The remainder of the RD/RA Work associated with CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 will

comprise the second grouping of work. RD activities for this group of work may begin prior to the completion of the CMUs 4 and 5 FMS Ponds RD/RA activities.

- (e) A description of the responsibility and authority of organizations related to the development of the RD;
- (f) Descriptions of areas requiring clarification and/or other needs (e.g., data gaps);
- (g) Pre-Design Component Investigation (PDCI) Work Plan-(s). The PDCI is intended to collect geotechnical data in approximate areas of anticipated construction; material characteristic data; characterization data for affected areas outside of the original OU-8 boundary, if necessary; and potentially other data to fill design data gaps. The PDCI Work Plan(s) will include the following:
 - (1) An evaluation and summary of existing data and description of data gaps;
 - (2) A field sampling plan including media to be sampled, testing and/or analytical methods for sample analysis, approximate sample locations, and number of samples; and
 - (3) A Quality Assurance Project Plan (QAPP) or reference to an applicable existing QAPP, as described in ¶ 8.4(d).
- (h) Description of RA Performance Standards, which will be consistent with Remedial Action Objectives;
- (i) Descriptions of applicable permitting requirements and other regulatory requirements;
- (j) Description of plans for obtaining access in connection with the work, such as property acquisition, property leases, and/or easements; and
- ~~(k) A Health and Safety Plan including an Emergency Response Plan as described in ¶ 8.4(a); and~~
- ~~(+)(k)~~ A proposed preliminary RA construction schedule.

4. REMEDIAL DESIGN - CMUs 4 AND 5 FMS PONDS

- 4.1 Description of Work:** The scope of CMUs 4 and 5 FMS Ponds RD/RA activities are described in ¶ 1.3(a) (Scope of Remedy). In general, the RD portion of this work includes the design of one or more evaporation ponds associated with CMUs 4 and 5. This work will provide maintainable fluid management impoundments for the Phase III-

4X HLP and the Phase III-South HLP in addition to providing adequate fluid storage volume to allow the remaining RD/RA activities under this SOW to be completed. CMUs 4 and 5 FMS Ponds RD Activities are anticipated to include the following:

- (a) Design of evaporation ponds and ancillary structures (berms, pumps, piping, ditches, etc.); and
- (b) Design of associated stormwater management components.

4.2 Draft CMUs 4 and 5 FMS Ponds Remedial Design: ARC shall submit a Draft CMUs 4 and 5 FMS Ponds RD for NDEP's comment. The Draft CMUs 4 and 5 FMS Ponds RD will include:

- (a) Preliminary results of data collected during the PDCI;
- (b) Preliminary drawings and technical specifications;
- ~~(b)(c)~~ Descriptions of permit requirements, if applicable;
- ~~(e)(d)~~ A description of monitoring and control measures to protect human health and the environment during the RA (e.g. air monitoring and dust suppression);
- ~~(d)(e)~~ Proposed revisions to the RD/RA Schedule that is set forth in ¶ 9.2 (RD/RA Schedule), if necessary;
- ~~(e)(f)~~ Construction Quality Assurance/Quality Control Plan;
- ~~(f)(g)~~ Institutional Controls Implementation and Assurance Plan; and
- ~~(g)(h)~~ O&M Plan.

4.3 Final CMUs 4 and 5 FMS Ponds Remedial Design: ARC shall submit the Final CMUs 4 and 5 FMS Ponds RD for NDEP approval. The Final CMUs 4 and 5 FMS Ponds RD will include the following components:

- (a) Final results of data collected during the PDCI;
- (b) A complete set of construction drawings and specifications; and
- (c) Final versions of the same elements and deliverables as are required for the Draft CMUs 4 and 5 FMS Ponds RD.

5. REMEDIAL DESIGN - CMUs 2, 4 (HLP), 5 (HLP), 6, AND 7 CLOSURE

5.1 Description of Work: The scope of CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD/RA activities are described in ¶ 01.3(b) (Scope of Remedy). In general, the RD portion of this work includes the closure design of CMUs 2, 4, 5, 6, and 7 heap leach pads, adjacent process and waste rock areas, and a number of related work activities. CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD activities are anticipated to include the following:

- (a) Design of heap leach pad and waste rock area closure;
- (b) Design of pond precipitate management;
- (c) Design of TENORM material closure;
- (d) Design of associated stormwater management components; and
- (e) Design of individual or combined fluids management ponds for CMUs 2, 6, and 7.

5.2 Draft CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure Remedial Design: ARC shall submit a Draft CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD for NDEP comment. The Draft CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD will include:

- (a) Preliminary results of data collected during the PDCI;
- (b) Preliminary drawings and technical specifications;
- (c) Descriptions of permit requirements, if applicable;
- (d) A description of monitoring and control measures to protect human health and the environment during the RA (e.g. air monitoring and dust suppression);
- (e) Proposed revisions to the RD/RA Schedule that is set forth in ¶ 9.2 (RD/RA Schedule), if necessary;
- (f) Construction Quality Assurance/Quality Control Plan;
- (g) Revised and updated Institutional Controls Implementation and Assurance Plan completed under Section 4.2(f) that incorporates CMUs 2, 4, 5, 6 and 7; and
- (h) O&M Plan.

5.3 Final CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure Remedial Design: ARC shall submit the Final CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD for NDEP approval.

The Final CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD will include the following components:

- (a) Final results of data collected during the PDCI;
- (b) A complete set of construction drawings and specifications; and
- (c) Final versions of the same elements and deliverables as are required for the Draft CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RD.

6. REMEDIAL ACTION

6.1 Remedial Action: ARC shall implement separate Remedial Action stages according to the same groupings of work activities developed in the RD/RA Work Plan and described in ¶ 1.3 and ¶ 3.1(d). It is anticipated that commencement of the two RA stages will be implemented in the following order: 1) CMUs 4 and 5 FMS Ponds RA; and 2) CMUs 2, 4 (HLP), 5 (HLP), 6, and 7 Closure RA. The requirements for RA described below apply to each stage of RA. Prior to beginning each RA stage, ARC shall submit to NDEP the following deliverables for approval:

- (a) An updated RA Construction Schedule;
- (b) An RA Monitoring Plan (updated at each subsequent stage of RA); and
- (c) An updated Health and Safety Plan that covers RA activities (for review purposes, only).

6.2 Meetings and Inspections

- (a) **Preconstruction Conference:** ARC will hold a preconstruction conference with NDEP and others as determined necessary by ARC or directed by NDEP.
- (b) **Periodic Meetings:** During the construction portion of each stage of RA (RA Construction), ARC shall meet regularly with NDEP, and others as determined necessary by ARC and as directed or determined by NDEP, to discuss construction issues.
- (c) **Inspections:**
 - (1) As deemed necessary, NDEP or its representative may conduct periodic inspections of the Work. At NDEP's request, ARC or ARC's designee will accompany NDEP or its representative during inspections.
 - (2) Upon notification by NDEP of any deficiencies in the RA Construction, ARC will take necessary steps to correct the deficiencies and/or bring the RA Construction into compliance with the approved Final RD, approved design changes, and/or the approved RD/RA WP.

6.3 Emergency Response and Reporting

- (a) **Emergency Response and Reporting:** If any action taken by ARC at the Site or if any occurrence arising from ARC's performance of the Work causes or threatens to cause a release of Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, ARC shall: (1) immediately take appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized NDEP officer (as specified in ¶ 6.3(c)) orally; and (3) take such actions in consultation with the authorized NDEP officer and in accordance with applicable laws and provisions of the Health and Safety Plan and Emergency Response Plan.
- (b) **Release Reporting:** Upon the occurrence of an event caused by the performance of the RA that ARC is required to report pursuant to NAC 445A.347, Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA), 42 U.S.C. § 11004, ARC shall immediately notify the authorized NDEP officer orally and the National Response Center at (800) 424-8802.
- (c) The "authorized NDEP officer" for purposes of immediate oral notifications and consultations under ¶ 6.3(a) and ¶ 6.3(b) is the NDEP Project Coordinator, NDEP Alternate Project Coordinator, or the NDEP Spill Reporting Hotline, which is staffed 24/7, if the NDEP Project Coordinator is unavailable.
- (d) For an event covered by ¶ 6.3(a) and ¶ 6.3(b), ARC shall: (1) within 14 days after the onset of such event, submit a report to NDEP describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 days after the conclusion of such event, submit a report to NDEP describing actions taken in response to such event.

6.4 Off-Site Shipments: ARC shall manage off-Site shipments of Waste Materials generated in connection with the implementation of the Remedial Action in accordance with Paragraph [66] of the Order.

6.5 Completion of RA Work: ARC shall document the completion of each phase of Remedial Action construction, achievement by the Remedial Action of the Performance Standards (RA completion), and completion of all Work required under this SOW in accordance with the process and associated requirements set forth in Section [XXX] of the Order.

7. REPORTING

- 7.1 **Progress Reports:** ARC shall submit annual summary reports and quarterly progress reports to NDEP, describing the actions undertaken to implement the RA, in accordance with Paragraphs [53] and [68] of the Order.

8. DELIVERABLES

- 8.1 **Applicability:** ARC shall submit deliverables for NDEP review/approval as specified in Section [X] of the Order.
- 8.2 **In Writing:** Deliverables under this SOW must be in writing unless otherwise specified.
- 8.3 **General Requirements for Deliverables:** Deliverables must be submitted by the deadlines in the RD/RA Schedule, as applicable. ARC will submit deliverables in electronic form. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", ARC will also provide NDEP with paper copies of such exhibits upon request by NDEP.
- 8.4 **Supporting Deliverables:** ARC shall submit each of the following supporting deliverables for NDEP approval, except as specifically provided. ARC shall update each of these supporting deliverables as necessary or appropriate during the course of the Work, and/or as requested by NDEP.
- (a) **Health and Safety Plan:** The Health and Safety Plan (HASP) describes activities to be performed to protect on site personnel from physical, chemical, and other hazards posed by the Work. ~~The HASP shall be initially submitted as part of the RD/RA Work Plan as described in ¶ 3.1.~~ The HASP should cover any RD field activities and should be, as appropriate, updated to cover activities during the RA and updated to cover activities after RA completion. NDEP does not approve the HASP, but will review it to ensure that necessary elements are included and that the plan provides for the protection of human health and the environment. ARC will submit the updated HASP for NDEP's review with its responses to NDEP's comments on the draft RD/RA Work Plan and before commencement of RD field activities.
- (b) **Emergency Response Plan:** The Emergency Response Plan (ERP) must describe procedures to be used in the event of an accident or emergency at the Site. ~~The An updated ERP shall be initially submitted as part of with the RD/RA Work Plan as described in ¶ 3.1, and may be contained within the updated HASP, as determined by ARC.~~ The ERP must include:
- (1) Name of the person or entity responsible for responding in the event of an emergency incident;

- (2) Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), consistent with the regulations under 40 C.F.R. Part 112, describing measures to prevent, and contingency plans for, spills and discharges;
 - (3) Notification activities in accordance with ¶ 6.3(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under NAC 445A.347, Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004; and
 - (4) A description of necessary actions to maintain compliance with ¶ 6.3 in the event of an occurrence during the performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment.
- (c) **Field Sampling Plan:** The Field Sampling Plan (FSP) addresses sample collection activities and is a required component of the PDCI Work Plan(s) as stated in ¶ 3.1(g). The FSP must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required.
- (d) **Quality Assurance Project Plan:** The Quality Assurance Project Plan (QAPP) augments the FSP and addresses sample analysis and data handling regarding the Work. A separate QAPP is not required to be submitted by ARC, if reference can be made within any PDCI Work Plan, FSP, or other sampling plan to an appropriate NDEP approved QAPP for other sampling and analysis work at the Site ~~that is applicable to the subject sampling~~. The QAPP must include a detailed explanation of ARC's quality assurance, quality control, and chain of custody procedures for treatability, design, compliance, and monitoring samples. The QAPP also must include procedures for satisfying the quality assurance requirements set forth in Section [XI] of the Order.
- (e) **RA Performance Standards:** RA Performance Standards shall be described within the RD/RA Work Plan and will be bound by the following considerations:
- (1) Erosion of cover materials will be minimized to ensure cover stability and long term protectiveness (measured via qualitative periodic observation);
 - (2) Cover slope stability shall be maintained to ensure integrity of final cover (measured via qualitative observations and/or periodic survey of monuments);
 - (3) Cover performance shall reduce migration of liquids through the HLP to ensure that the fluid management ponds operate below their maximum fluid storage volume (measured via collection of O&M data related to pond fluid level);

- (4) Capacity and dimensions of fluid management ponds shall be adequate to provide containment and evaporation of collected fluids and allow for periodic removal of precipitated solids (measured via collection of O&M data related to pond fluid level and solids removal); and
 - (5) Stormwater management features shall minimize runoff to the HLP cover systems (measured via qualitative observation following events or periodically).
- (f) **RA Monitoring Plan:** The purpose of the RA Monitoring Plan (RAMP) is to obtain information, through monitoring, about the movement of and changes in contamination throughout the Site, after implementation of the RA; to obtain information to determine whether Performance Standards are achieved; and to obtain information to determine whether to perform additional actions, including further RA monitoring. ARC shall submit the RAMP prior to initiation of the CMUs 4 and 5 FMS Pond RA construction activities. The RAMP will be updated prior to initiation of each successive stage of RA construction. The RAMP must include the following, to the extent that they are applicable to the Work:
- (1) Description of the environmental media to be monitored;
 - (2) Description of the data collection parameters, including existing and proposed monitoring devices and locations, schedule and frequency of monitoring, analytical parameters to be monitored, and analytical methods employed;
 - (3) Description of how performance data will be analyzed, interpreted, and reported, and/or other Site-related requirements;
 - (4) Description of verification sampling procedures;
 - (5) Description of deliverables that will be generated in connection with monitoring, including sampling schedules, laboratory records, monitoring reports, and progress reports to NDEP; and
 - (6) Description of proposed additional or reduced monitoring and data collection actions in the event that results from monitoring devices indicate changed conditions.
- (g) **Construction Quality Assurance/Quality Control Plan (CQA/QCP):** The purpose of the Construction Quality Assurance Plan (CQA) is to describe planned and systemic activities that provide confidence that the RA construction will satisfy plans, specifications, and related requirements, including quality objectives. The purpose of the Construction Quality Control Plan (QCP) is to describe the activities to verify that RA construction has satisfied plans, specifications, and related requirements, including quality objectives. The CQA/QCP must:

- (1) Identify and describe the responsibilities of the organizations and personnel implementing the CQA/QCP;
 - (2) Describe the activities to be performed: (i) to provide confidence that quality objectives will be met; and (ii) to determine whether quality objectives have been met;
 - (3) Describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the CQA/QCP;
 - (4) Describe industry standards and technical specifications used in implementing the CQA/QCP;
 - (5) Describe procedures for tracking construction deficiencies from identification through corrective action;
 - (6) Describe procedures for documenting CQA/QCP activities; and
 - (7) Describe procedures for retention of documents and for final storage of documents related to CQA/QCP.
- (h) **O&M Plan:** The O&M Plan describes requirements for inspecting, operating, and maintaining the RA. The O&M Plan may be included with the Final RD or may be completed at any time prior to the completion of each stage of RA construction and must include the following requirements:
- (1) Description of Performance Standards required to be met to implement the ROD;
 - (2) Description of operation and maintenance activities to be performed to provide confidence that Performance Standards will be met;
 - (3) Description of records and reports that will be generated during O&M, such as daily operating logs, laboratory records, records of operating costs, reports regarding emergencies, personnel and maintenance records, monitoring reports, and progress reports to NDEP and other State agencies; and
 - (4) Description of alternative procedures in case of systems failure (if appropriate to the RA), including: (i) alternative procedures to prevent the release or threatened release of Waste Material which may endanger public health and the environment or may cause a failure to achieve Performance Standards; (ii) analysis of vulnerability and additional resource requirements should a failure occur; (iii) notification and reporting requirements should O&M systems fail or be in danger of imminent failure; and (iv) community notification requirements.

- (i) **Institutional Controls Implementation and Assurance Plan:** The Institutional Controls Implementation and Assurance Plan (ICIAP) describes plans to implement, maintain, and enforce the Institutional Controls (ICs) at the Site. The ICIAP must include the following requirements:

- (1) Locations of recorded real property interests (e.g., easements, liens) and resource interests in the property that may affect ICs (e.g., surface, mineral, and water rights) including accurate mapping and geographic information system (GIS) coordinates of such interests; and
- (2) Legal descriptions and survey maps.
- (3) Description of the institutional controls required by the ROD, including mechanisms, objectives, locations to be included, and agencies or parties involved in implementation; (4) Plan and schedule for implementing institutional controls, including required administrative or legal processes.

9. SCHEDULES

- 9.1 Applicability and Revisions:** Deliverables required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the RD/ RA Deliverable Schedule set forth below. ARC may submit proposed revised RD/RA Deliverable Schedules for NDEP approval. Upon NDEP's approval, the revised RD/RA Deliverable Schedule supersedes the RD/RA Deliverable Schedule set forth below, and any previously-approved RD/RA Deliverable Schedules.

9.2 RD/RA Deliverable Schedule

RD/RA Deliverable		Schedule
1	Remedial Design/Remedial Action Work Plan - Includes Health & Safety Plan, Emergency Response Plan, RA Performance Standards, Pre-Design Component Investigation Work Plan, and Preliminary RA Construction Schedule	90 days after Effective Date of Order
2	<u>Updated Health and Safety Plan and Emergency Response Plan</u>	<u>60 days prior to Remedial Action Construction</u>
23	Draft CMU 4 and 5 FMS Ponds Remedial Design Report - Includes initial Pre-Design Component Investigation results, Construction QA/QC Plan, Institutional Controls Implementation and Assurance Plan, and Updated RA Construction Schedule	90 days after NDEP Approval of RD/RA Work Plan
34	Final CMU 4 and 5 FMS Ponds Remedial Design Report	90 days after NDEP Comments Received on Draft Design Report

	RD/RA Deliverable	Schedule
45	Draft CMU 2, 4 (HLP), 5 (HLP), 6, and 7 Remedial Design Report ⁽¹⁾ - Includes initial Pre-Design Component Investigation results, Construction QA/QC Plan, Institutional Controls Implementation and Assurance Plan, and Updated RA Construction Schedule	365 days after NDEP Approval of RD/RA Work Plan
56	Final CMU 2, 4 (HLP), 5 (HLP), 6, and 7 Remedial Design Report	280 days after NDEP Comments Received from Draft Design Report
67	Progress Reports (Quarterly Progress and Annual Summary)	Quarterly Progress Reports due by 10 th day of April, July, October, and January. Annual Summary Report for previous year is due by May 1.
78	CMU 4 and 5 FMS Ponds O&M Plan	Prior to completion of Remedial Action Construction
89	CMU 2, 4 (HLP), 5 (HLP), 6 and 7 O&M Plan	Prior to completion of Remedial Action Construction
91 0	Remedial Action Monitoring Plan(s)	Prior to start of Remedial Action Construction
10 11	CMU 4 and 5 FMS Ponds Remedial Action Construction Completion Report	60 days after pre-certification inspection per the AOC
11 12	CMU 2, 4 (HLP), 5 (HLP), 6 and 7 Remedial Action Construction Completion Report	60 days after pre-certification inspection per the AOC

Table Notes:

- (1) As described in SOW Section 04-3(b), FMS Ponds for CMUs 2, 6, and 7 will be designed and constructed as appropriate.